DOCUMENT RESUME

ED 135 508 RC 009 647

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TITLE	Bilingual Mini-School Tutoring Project. A State of Washington URRD (Urban, Rural, Racial, Disadvantaged) Program. Final Evaluation, 1975-76 Program Year.
INSTITUTION	Washington State Intermediate School District 104, Ephrata.
SPONS AGENCY	Washington Office of the State Superintendent of Public Instruction, Olympia.
PUB DATE	76
NOTE	33p.; For related documents, see ED 116 872-875, ED 121 497. Not available in hard copy due to marginal legibility of original document
EDRS PRICE	MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS	Academic Achievement; Bilingual Education; Cultural Awareness; *Early Childhood Education; *Interstate Programs; Mexican Americans; *Migrant Education; *Mobile Educational Services; *Parent Participation; Program Evaluation; Reading Achievement; *Tutorial Programs
IDENTIFIERS	*Washington

ABSTRACT

The early education program uses paraprofessional teachers to provide bilingual multicultural education to children of migrant and seasonal farm workers. The program operates on an interstate and interdistrict basis. Interstate migrant children from south Texas are followed from their home base community to northern locations. By working cooperatively with the schools, the mobile project staff which follows the children arranges to work with them on released time from their regular classes, or else after school, providing supplementary education as nearly as possible year-round to a moving population. Parents and community members are active in program management decisions involving organization matters, review and input into funding proposals, hiring of teaching staff, use of parent funds, and participation in program evaluation. Family members participate in the program through acting as teachers or teaching assistants, assisting with cultural heritage activities, and providing support services. Of the 169 children served during 1975-76, 156 were Mexican Americans. Summarizing the program's progress during 1975-76, this report briefly describes the measurement used and the basis for indicating that the objective was exceeded, met, partially met, or not met. Overall the program has met or exceeded its goals. (NQ)

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ED135508

BILINGUAL MINI-SCHOOL TUTORING PROJECT

A STATE OF WASHINGTON URRD* PROGRAM

(*Urban, Rural, Racial, Disadvantaged)

Walt Barbee, URRD Supervisor

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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FINAL EVALUATION

1975-76 PROGRAM YEAR

Prepared by Beverly McConnell, Evaluator

An early education program using paraprofessional teachers to provide bilingual multicultural education to children of migrant and seasonal farm workers.

GRANTEE:
Educational Service District 104
Ernest Forge, Superintendent
Box 605, Ephrata, WA. 98823

PROJECT MANAGER:
Louise Gustafson
P. O. Box 2367, Pasco, WA 99302
509-547-8442

RC 009647

1 SCHOOL DISTRICT Education Service Dist. 104

2 PROJECT TITLE Bilingual Mine School Tutoring Project

3 URRD Bilingual

5 SIGNATURE OF SCHOOL DISTRICT SUPERINTENDENT Louise Bustafson

6 SIGNATURE OF PROJECT DIRECTOR

7 DATE July 13, 1976

URRD PROJECT FLASH SHEET

PART I A STATISTICAL ABSTRACT

TOTAL PROJECT COST	URRD GRANT	DISTRICT FUNDS	OTHER LOC STATE OR FEDERAL	URRD UNDER-SPEND	NO OF SITES	GRADE LEVEL	AVERAGE COST PER PUPIL	TOTAL NUMBER SERVED	BLACK	AMERICAN INDIAN	MEXICAN AMERICAN	ASIAN AMERICAN	OTHER	TOTAL STAFF	PROF EMPLOYED	PARA PROF EMPLOYED	PREVIOUSLY UNEMPLOYED	NUMBER OF VOLUNTEERS	TOTAL NO VOLUNTEER HOURS			
83,667.	79 34,650.	600.	39,903.	982.21	B	Prek -3		169			156		13	4	0	4	0	**	**	*	30	

PART II AN EVALUATION PROFILE (WHAT ACTUALLY HAPPENED TO THE PARTICIPANTS AS A DIRECT RESULT OF THIS URRD PROJECT)

(DO NOT ABBREVIATE YOUR OBJECTIVES!) – LIST YOUR OBJECTIVES BELOW –

	AFTER EACH OBJECTIVE CHECK APPROPRIATE COLUMN				
	EXCEEDED	MET	PART MET	NOT MET	PRODUCT PROCESS
1. MATH. At least 50% of project children will increase their grade equivalent score on the WRAT math subtest, by one or more months for each 20-day period of attendance from pre- to post-test.	X				PRODUCT
2. READING. At least 50% of project children will increase their grade equivalent score on the WRAT reading subtest, by one or more months for each 20-day period of attendance from pre- to post-test.	X				PRODUCT
3. MOBILE PROJECT COMPARED TO CONTROLS. Project children will show a significant superiority in math and reading to control group migrant children of comparable grade level.	X				PRODUCT
4. BILINGUAL CAPABILITY. At least 50% of project children will show an increased bilingual capability by advancing one or more steps on the project language classification scale after 100 or more days enrollment in the program.	X				PRODUCT
5. CULTURAL HERITAGE. Project children will show superiority over a non-project comparison group on the project developed test of cultural concepts.	X				PRODUCT
6. CURRICULUM. Project teachers will provide instruction each week in project approved, programmed curriculum materials for math, reading, and oral language, as documented by end-of-the week curriculum reports on the placement of each child.		X			PROCESS
7. CULTURAL HERITAGE CURRICULUM. Project teachers will present cultural heritage lessons in the six areas of the revised cultural heritage curriculum as documented by reports on cultural heritage activities in the weekly pupil progress reports submitted by each teacher. (Note this objective was revised and approved as a program change 4/76)		X			PROCESS
(continued on second flash sheet)					
TOTAL NUMBER OF PRODUCT OBJECTIVES					
TOTAL NUMBER OF PROCESS OBJECTIVES					
GRAND TOTAL					

3

(COMPLETE ALL SECTIONS OF THE FLASH SHEETS.)

(see p. 2 for totals)

RETURN TO WALT BARBEE.

* All parents of children enrolled are considered members of the advisory committee.

** See pages 12 and 13 for report of volunteer activities.

1. SCHOOL DISTRICT

2. PROJECT TITLE 4. PROJECT NUMBER

3. URRD [illegible] SUPPORTED

5. SIGNATURE OF SCHOOL DISTRICT SUPERINTENDENT

6. SIGNATURE OF PROJECT DIRECTOR 7. DATE

URRD PROJECT FLASH SHEET

PART I A STATISTICAL ABSTRACT

TOTAL PROJECT COST	URRD GRANT	DISTRICT [illegible]	OTHER STATE OR FEDERAL	URRD UNDER-SPEND	NO. OF SITES	GRADE LEVEL	AVERAGE COST PER PUPIL	TOTAL NUMBER SERVED	BLACK	AMERICAN INDIAN	MEXICAN AMERICAN	ASIAN AMERICAN	OTHER	TOTAL STAFF	PROF. EMPLOYED	PARA-PROF. EMPLOYED	PREVIOUSLY UNEMPLOYED	NUMBER OF VOLUNTEERS	TOTAL NO. VOLUNTEER HOURS	NUMBER OF [illegible]

PART II AN EVALUATION PROFILE (WHAT ACTUALLY HAPPENED TO THE PARTICIPANTS AS A DIRECT RESULT OF THIS URRD PROJECT

(DO NOT ABBREVIATE YOUR OBJECTIVES!) - LIST YOUR OBJECTIVES BELOW -

	AFTER EACH OBJECTIVE [illegible] APPROPRIATE COLUMN [illegible]				[illegible]
	EX-CEED-ED	MET	PART MET	NOT MET	PRODUCT PROCESS
(continuation of flash sheet--page 2)					
8. PARENTS IN MANAGEMENT. Parents and community members of advisory boards for each site will be active in program management decisions involving (a) organizational matters--voting for officers, meeting time scheduling, parent planned activities; (b) review and input into funding proposals; (c) interviewing and selection of teaching staff as well as other personnel actions; (d) decisions regarding use of parent funds; (e) discussion of hours of operation, curriculum, and other aspects of the educational program; (f) participation in program evaluation.		X			PROCESS
9. FAMILIES HELP PROGRAM. Family members equal to at least one-third the enrollment capacity at each site will participate in their children's educational program through (a) acting as a teacher or teaching assistant, (b) assisting with cultural heritage activities; (c) participating in programs in which parents and children interact in educational games; (d) providing support services such as assisting with rehabilitating centers, making equipment, laundry or repairs, providing transportation, etc.	X				PROCESS
TOTAL NUMBER OF PRODUCT OBJECTIVES	5	0	0	0	
TOTAL NUMBER OF PROCESS OBJECTIVES	1	3	0	0	
GRAND TOTAL	6	3	0	0	

(COMPLETE ALL SECTIONS OF THE FLASH SHEETS.)

RETURN TO WALT BARBEE.

PART III: A NARRATIVE SUMMARY

1. For each objective listed under PART II, AN EVALUATION PROFILE, briefly describe the measurement used and the basis for indicating that the objective has been exceeded, met, partially met, or not met.

2. State your formula for computing the average-cost-per-child figure in Part I, A STATISTICAL ABSTRACT.

3. State your district's estimated per-pupil expenditure and indicate how the money is spent on children in this URRD project.

4. Break down and identify other local, state, or federal funds reported in Part I, block 4.

5. List the additional services provided and indicate the additional number of students served by the program as a direct result of any cooperative federal funding listed in Part I.

6. Briefly describe the basis on which your project attendance is recorded. Where are these attendance records filed and who is responsible for keeping them current?

7. What is the most outstanding component (or aspect) of this project?

8. What are the project's major weaknesses?

9. How many children are on your waiting list? None

10. How many times has your local Advisory Committee met this year 30 ?

11. Do you keep minutes of each formal meeting? Yes

12. In the spaces below, indicate the cost in dollars and personnel-days needed for you to perform an academic progress follow-up report on students served by your URRD program over the past two to six years:

$2,060	33
Dollars	Personnel Days

SPECIAL ATTENTION!

NOTE: PLEASE PLACE THE URRD FLASH SHEET(S) AT THE BEGINNING OF YOUR FINAL REPORT.

(COMPLETE ALL SECTIONS OF THE NARRATIVE SUMMARY).

RETURN TO WALT BARBEE BY JULY 15, 1976.

PART III: A NARRATIVE SUMMARY

1. For each objective under Part II, AN EVALUATION PROFILE, briefly describe the measurement used and the basis for indicating that the objective has been exceeded, met, partially met, or not met.

   1. MATH. At least 50% of project children will increase their grade equivalent score on the Wide Range Achievement Test math subtest, by one or more months for each 20-day period of attendance from pre- to post-test.

      (a) Measurement used: Wide Range Achievement Test, math subtest.

      (b) Achievement criteria: The goal is considered met if 50% or more of the children tested have increased their grade equivalent score by one month for each 20-day period of attendance (to the nearest interval) from their latest test to the next previous test.

      FINDINGS:

      (1) Cumulative analysis. All tests since 2/74 when program started. (All children were in URRD program at time of latest test. Previous tests may have been while child was still in preschool program.)

Total number of tests:	293
Number in which gain was one or more months GE for each 20-day attendance:	207
Percentage meeting gain criteria:	71%

      EXCEEDS PROJECT GOAL

      (2) Current analysis. Only tests during period November 1975 through April 1976, e.g., last six months up to deadline made necessary to allow analysis of tests for evaluation.

Total number of tests:	55
Number in which gain was one or more months GE for each 20-day attendance:	39
Percentage meeting gain criteria:	71%

      EXCEEDS PROJECT GOAL

NOTE: For additional information on testing and data collection procedures, see Appendix A. The technical report in Appendix A also contains detail on methods of data analysis, and additional findings related to each of the instructional objectives which would help in the interpretation of project results.

(3) Distribution of gains from tests in current analysis (e.g., 11/75 through 4/76):

Range of months GE gained per 20-day attendance unit between tests	Number of Children	Percentage of Group
Increased 3.5 to 5.5 months GE per 20-days attendance:	6	11%
Increased 2.5 to 3.4 months GE per 20-days attendance:	11	20%
Increased 1.5 to 2.4 months GE per 20-days attendance:	10	18%
Increased 1.0 to 1.4 months GE per 20-days attendance:	12	22%
----------Project Goal----------		
Increased 0.1 to 0.9 months GE per 20-days attendance:	8	15%
No gain or lower score:	8	15%

Median score 1.4 months gain

EXCEEDS PROJECT GOAL

INTERPRETATION OF FINDINGS:

1. The grade equivalent scores are nationally standardized to represent an increment in scores corresponding to a month of schooling. The criteria of one month GE for 20-days attendance therefore is a rough measure of when children are "keeping up" or making accelerated gains, which is the goal of the program. The percentage of children required in the project goal to meet this standard was 50%, and 71% actually met the goal.

2. The analysis of recent tests compared to the analysis of long-term project gains indicates the high percentage of children making normal or accelerated gains in math is being maintained.

3. The median gain was 1.4 months GE for every 20-days attendance, instead of the 1.0 months gain called for in the project goal.

CONCLUSION: On the basis of these findings, the goal was reported as exceeded.

2. READING. At least 50% of project children will increase their grade equivalent score on the Wide Range Achievement Test reading subtest, by one or more months for each 20-day period of attendance from pre- to post-test.

(a) Measurement used: Wide Range Achievement Test, reading subtest.

(b) Achievement criteria: The goal is considered met if 50% or more of the children tested have increased their grade equivalent score by one month for each 20-day period of attendance (to the nearest interval) from their latest test to the next previous test).

FINDINGS:

(1) Cumulative analysis. All tests since 2/74 when program started. (All children were in URRD program at time of latest test. Previous tests may have been while child was still in preschool program.)

Total number of tests:	193
Number in which gain was one or more months GE for each 20-days attendance:	115
Percentage of test group meeting gain criteria:	60%

EXCEEDS PROJECT GOAL

(2) Current analysis: Only tests during period November 1975 through April 1976, e.g., the last six months up to the April cut-off date necessary to allow analysis of tests for evaluation.

Total number of tests:	55
Number in which gain was one or more months GE for each 20-days attendance:	42
Percentage of test group meeting gain criteria:	76%

EXCEEDS PROJECT GOAL

(3) Distribution of gains, for tests in current analysis, by language classification.

Range of months GE gained per 20-day attendance between tests:	Number by Lang. Classification Spanish w/Limited English	English w/Limited Spanish	Spanish & English Bilingual	% of Total Group
Gained 3.5-6.3 mo.	1	0	7	15%
Gained 2.5-3.4 mo.	1	1	8	18%
Gained 1.5-2.4 mo.	1	1	8	18%
Gained 1.0-1.4 mo.	2	2	10	25%
----------Project Goal----------				
Gained 0.1-0.9 mo.	0	4	7	20%
No gain or lower score	0	0	2	4%

MEDIAN SCORE 1.5 MONTHS GAIN

EXCEEDS PROJECT GOAL

INTERPRETATION OF FINDINGS:

1. In the cumulative analysis of gain scores since the project started, 60% have met or exceeded the goal of at least one month GE for each 20-day attendance period between tests, which would indicate normal or accelerated progress. This is well above the 50% standard established in the project goal.

2. In the most recent six months the percentage of children meeting the project goal has risen to 76%, which would seem to indicate the program is becoming stronger in the teaching of reading skills.

3. The median gain score was 1.5 months GE for each 20-day period of attendance--50% higher than the project goal.

4. The gain scores of all children classified as Spanish dominant with limited English all exceed the project goal. (This breakdown of gains by language classification was to see if lack of comprehension in English was related to low gain scores. In this sample this does not appear to be true. The six-month sample reported in the mid-year evaluation showed the same pattern.)

CONCLUSION: On the basis of these findings, the goal was reported as EXCEEDED.

3. MOBILE PROJECT COMPARED TO CONTROLS. Project children will show a significant superiority in math and reading to control group migrant children of comparable grade level.

(a) Measurement used: Wide Range Achievement Test, math and reading subtests.

(b) Achievement Criteria: The goal is considered met if project children who have been enrolled in the mobile component at two or more locations, and who have attended the program for 200 or more days since November 1973 (part of this attendance may be in the preschool program from which the school-age enrollment is drawn), show a superiority in mean raw score by grade level over the mean raw score by grade level of the control group, which is statistically significant at the .05 level.

FINDINGS:

Mean raw scores in math and reading are shown below:

	N	Math	Reading
KINDERGARTEN			
Controls	16	7.0	8.2
Project	6	17.7*	20.7*
FIRST GRADE			
Controls	14	13.9	13.6
Project	10	21.0*	25.2*
SECOND GRADE			
Controls	15	18.4	19.7
Project	7	22.7*	33.3*

*This superiority is statistically significant beyond the .05 level.

INTERPRETATION OF FINDINGS:

1. One demonstration aspect of the project is the delivery system used in the mobile program. Children who move in interstate migration from Texas are taught both in Texas and in temporary locations where they move in the north by a mobile staff which moves with them. A control group also from south Texas that migrates yearly out of their home base area was tested as representing the effects of migrancy on educational achievement without the mobile program.

   Kindergarten children in the mobile project have average scores in both math and reading which are more than twice as high as the control group. The mean raw score of project kindergarten children in reading is higher than that of control group children in second grade.

2. The superiority of the mobile project students in all three grades in both math and reading is statistically significant beyond the .05 level set as the project goal. An ".05 level" indicates the probability of this much superiority by chance is less than 5 in 100. In fact the statistical significance of all scores was beyond the .005 level (probability of this much superiority by chance less than 5 in 1,000).

CONCLUSION: The project goal was exceeded.

4. BILINGUAL CAPABILITY. At least 50% of project children will show an increased bilingual capability by advancing one or more steps on the project language classification scale after 100 or more days enrollment in the program.

(a) Measurement used: Peabody Picture Vocabulary Test, Form A in English, Form B in Spanish.

(b) Achievement criteria: The goal is considered met if 50% or more of the children tested after a 100-day attendance interval have moved to a higher language classification based on an increase in their second language score in relationship to their score in their primary language, as measured by the Peabody Picture Vocabulary Test Form A in English, and Form B in Spanish.
(Classification used:
1=second language score negligible, less than 9 points
2=second language score over 10 points, but less than 50% as high as primary language score
3=second language score more than 50% as high as primary language score
4=second language score equal to or surpasses initial primary language scores

FINDINGS:

1. Children who have increased their bilingual capability by one or more steps on the project language classification scale, based on PPVT scores in Spanish and English, after 100 or more days project attendance. (Analysis excludes children whose pretest classified them in top group from which no increase was possible.)

No. in Analysis Group	No. Advancing on Scale	% of Analysis Group	Meets Goal?
71	59	83%	Yes

INTERPRETATION OF FINDINGS:

1. The project goal set a minimum requirement that at least 50% of the children would achieve a higher bilingual classification after 100 or more days project attendance.

   The comparison of current classification with initial classification of the 71 children in the analysis group indicates 83% have improved their bilingual capability. This far exceeds the project minimum goal.

CONCLUSION: Project goal was EXCEEDED.

5. CULTURAL HERITAGE. Project children will show superiority over a non-project comparison group on the project developed test of cultural concepts.

(a) Measurement used: BMHS Test of Cultural Concepts (see Appendix B for technical report on this project developed instrument.)

(b) Achievement criteria: The goal will be considered met if the average score achieved by project children exceeds the average score of comparison group children, assuming 10 or more children in each group.

FINDINGS:

(1) Project children in the analysis group were children tested during the period February through June, 1976, who, at the time of testing, had attended the program for 100 or more days since February 1, 1974 (when the cultural heritage curriculum was initiated).

Comparison group children were children recruited using the same enrollment criteria as this project (migrant or seasonal farm worker, poverty level income, Spanish/English home languages) served in programs operating under NRO or under the Educational Institute for Rural Families.

MEAN RAW SCORE ON BMHS TEST OF CULTURAL CONCEPTS

Age Level	Comparison Group	Project Group
4.11 and under	(N=15) 18	(N=47) 26*
5.0 and over	(N=14) 27	(N=87) 34*

*This superiority is statistically significant beyond the .0005 level--e.g., possibility that this would occur by chance less than 5 in 10,000.

Raw score = number correct out of 44-item test.

INTERPRETATION OF FINDINGS:

1. The project is having a significant effect in raising the level of knowledge of Mexican and United States culture, as measured by this test. The test covers aspects of culture involving national symbols, songs, dances and musical games, holidays and celebrations, food and clothing.

Because the test had not been developed at the time the goal was established, no level of

significance was set in the achievement criteria since it was not known how reliable an instrument of measurement could be developed. As noted in Appendix B the test has proved quite stable with a .90 reliability based on item analysis. As such it was considered appropriate to apply tests of statistical significance. The convention is that a .05 level is considered an acceptable level of reliability. A .0005 level is a higher standard, and both age groups compared showed a superiority of the project group using this higher standard. On this basis the goal was indicated to have been EXCEEDED.

CONCLUSION: Goal was EXCEEDED.

6. ACADEMIC CURRICULUM. Project teachers will provide instruction each week in project approved, programmed curriculum materials for math, reading, and oral language, as documented by end-of-the-week curriculum reports on the placement of each child.

(a) Documentation used: Checklist recording receipt of a weekly pupil progress report from each teacher.

(b) Achievement criteria: The goal will be considered met if end-of-the-week progress reports are received from every teacher (or substitute) for each week of program operation. (This excludes relocation periods and vacation closures.)

FINDINGS: The evaluator has received from every teacher or substitute, for each week of program operation, an attendance and end-of-week placement report indicating child progress through the curriculum materials. This process objective has therefore been fully met.

CONCLUSION: Project goal has been met.

7. CULTURAL HERITAGE CURRICULUM. Project teachers will present cultural heritage lessons in the six areas of the revised cultural heritage curriculum as documented by reports on cultural activities in the weekly pupil progress reports submitted by each teacher.

(a) Documentation used: Weekly Pupil Progress Reports which each teacher submits weekly. A section of the report calls for a description of any cultural heritage activities conducted that week.

(b) Achievement criteria: The goal will be considered met if 80% of the teachers who have taught in the program for four weeks or longer have reported cultural heritage lessons in one or more of the six areas of the revised cultural heritage curriculum, based on the weekly pupil progress reports.

FINDINGS:

1. During the 1975-76 program year, 23 different teachers (nearly all on a part-time basis, funded by URRD and other sources) taught school-age groups for periods of four weeks or longer. The weekly reports indicate cultural heritage lessons taught as indicated.

Site	No. of Staff	Number and Percent Reporting Cultural Heritage Lessons		Meets Project Goal?
Connell	7	6	86%	Yes
Moses Lake	6	6	100%	Yes
Grulla and mobile locations	10	9	90%	Yes
Total Project	23	21	91%	Yes

2. The majority of teachers with the program longer than four weeks had included lessons in three or more of the six targeted subject areas. The percentage of teachers including lessons in the six subject areas are as follows:

Subject Area for Cultural Heritage Lessons	Number and Percentage of Teachers Reporting One or More Lessons in This Area	
1. National symbols (flags, eagle and serpent, etc.)	17	74%
2. Holidays and celebrations	15	65%
3. Songs	12	52%
4. Dances	10	43%
5. Foods	4	17%
6. Clothing	0	0%
7. Other (outside above areas)	15	65%

It is likely that the above represents some under-reporting--i.e., all centers have taught songs but not all teachers reported it.

INTERPRETATION OF FINDINGS:

1. The inclusion of activities related to the children's cultural heritage is being followed by 91% of the teachers.

2. A variety of aspects of culture, United States and Mexican, is being taught.

CONCLUSION: This process objective is being met.

8. PARENTS IN MANAGEMENT: Parents and community members of advisory boards for each site will be active in program management decisions involving (a) organizational matters--voting for officers, meeting time scheduling, parent planned activities; (b) review and input into funding proposals; (c) interviewing and selection of teaching staff as well as other personnel actions; (d) decisions regarding use of parent funds; (e) discussion of hours of operation, curriculum, and other aspects of the educational program; (f) participation in program evaluation.

(a) Documentation used: Minutes of meetings of Advisory Boards from each site; Written Evaluations of the program done by parents and mailed to the evaluator.

(b) Achievement criteria: The goal is considered met if the analysis of minutes of parent-community advisory board meetings from every site confirm action taken in at least four out of the six specified areas.

FINDINGS:

1. The evaluator has a record of 10 parent community advisory group meetings from each of the three sites, plus eight special meetings (personnel, executive committee, ad hoc committees on formation of bylaws) at which business was conducted. In addition, parent evaluation was carried out at two sites with the submission of written evaluation reports.

2. From the above records it is evident that the advisory groups are active in program management. The following listing is a selection of references from minutes (or evaluation documents) of action that fits areas named in the project goal.

GRULLA	CONNELL	MOSES LAKE
A. Organizational matters and parent activities:		
11/75 Appoint acting committee member	7/75 Orient new officers to their jobs	7/75 Plan election
12/75 Approve new member for Co-op Board	7/75 Plan raffle of pinata	8/75 Election of officers
	2/76 Discuss by-laws, extending membership to any in extended family	11/75 Appoint new vice president
		2/76 By-laws discussed
		3/76 Vote in community members to board
		6/76 Plan school picnic

B. Review proposals:

2/76 Discuss new proposal (45 parents present)	12/75 Discuss Title I proposal 2/76 Discuss URRD proposal and Title VII proposal	2/76 Discuss URRD proposal and Title VII proposal

C. Personnel actions:

10/75 Discuss hiring secretary and several teachers 11/75 Discuss CETA and manpower staff	11/75 Interview and recommend staff to be hired 2/76 Interview and recommend hiring 3/76 Interview and recommend hiring (Note: All staff recommended were hired)	7/75 Interview and recommend hiring for immediate openings, order of preference for future openings (Note: All staff recommended were eventually hired)

D. Use of parent funds:

10/75 Recommend transfer of accounts for funds 4/76 Approve $150 emergency loan from fund	1/76 Authorize use of funds for materials and cabinets for program	9/75 Authorize funds for car repair 11/75 Authorize buying lamp and Christmas gifts 1/76 Purchase pictures

E. Setting hours, curriculum, decisions regarding operations:

8/75 (Prosser WA) Set hours for Prosser Center. Discuss need for center at Dayton, WA. Bussing problems for school kids 12/75 (Grulla TX) Presentation by two teachers demonstrating curriculum, discussion of curriculum	9/75 Discuss hours 1/76 Discuss importance of children learning two languages, like take-homes, disc. curriculum 2/76 Request that spelling be added to curriculum	1/75 Discuss eligibility forms 1/76 Discuss math and reading program 2/76 Approve adding reading in Spanish to curriculum 6/76 Teacher demonstrates Distar English and Spanish Discuss language curriculum

1/76 (Grulla TX) Plan Family Fun Night Educ. activities
5/76 (Eltopia WA) Discuss bussing kids
5/76 (Kahlotus WA) Discuss bussing--why center located Basin City
5/76 (Basin City WA) Bus schedule, discuss program

F. Participate in program evaluation:

11/75 Trainer reviewed project evaluation and group discussed 2/76 Parent volunteers did independent visits to classrooms and completed evaluations	2/76 Selected members to do evaluations 3/76 Several parents visited program, seeing each curriculum being taught and completed detailed evaluations with recommendations

INTERPRETATION OF FINDINGS:

1. The Grulla and Mobile sites were active in five of the six areas specified in the program goal--did not have parents participating in evaluation this year. The other two sites had parent management activity in all six specified areas. (As evaluator, having analyzed minutes for the past five years, a perspective view would be that the management participation by parents has grown steadily and that the past year saw more, and more varied, action by parents and other members of the extended family plus community members elected to serve on these boards, than ever before.)

CONCLUSION: The project goal was fully met.

9. FAMILIES HELP PROGRAM. Family members equal to at least one-third the enrollment capacity at each site will participate in their children's educational program through (a) acting as a teacher or teaching assistant, (b) assisting with cultural heritage activities, (c) participating in programs in which parents and children interact in educational games, (d) providing support services such as assisting with rehabilitating centers, making equipment, laundry or repairs, providing transportation, etc.

(a) Documentation used: Vouchers submitted for compensation to parent fund based on volunteer services by family members; registry of attendance at family fun nights (educational game evenings for parents and children), teacher rosters.

(b) Achievement criteria: Family or community members equal to at least one-third the enrollment capacity at each site will contribute to the support of the program with personal services in the specified categories above. On the basis of projected enrollments, this would mean 18 or more at Moses Lake, 17 or more at Connell, and 28 or more at Grulla.

FINDINGS:

(1) At the time of this evaluation, documentation of all participation in the program throughout the the year at all sites was not quite complete. The following figures, therefore, understate the numbers that have participated in one of the four ways indicated above, during the 1975-76 program year.

Number of family or community members who have helped the program in one of the four ways specified above:

GRULLA 101 CONNELL 50 MOSES LAKE 44

INTERPRETATION OF FINDINGS:

1. The participation at all sites has been two to three times as many people helping the program in the various ways than projected in the project goal, even on the basis of incomplete tabulation. On this basis, the objective was considered to have been exceeded.

CONCLUSION: The goal was EXCEEDED.

2. State your formula for computing the average-cost-per-child figure in Part I, A STATISTICAL ABSTRACT.

Total cost divided by total children enrolled during year.

3. State your district's estimated per-pupil expenditure and indicate how the money is spent on children in the URRD district.

As the applicant is an Educational Service District, it does not operate any schools directly and cannot, therefore, give any per-pupil expenditure.

In addition, this particular project operates on an inter-district, inter-state basis (although all costs out-of-state are from other funding sources). During the past year mobile program children were served in Mabton, Lynden, Prosser, Pasco, Kahlotus, Basin City, and Walla Walla--the year-round sites operated in Mesa, Connell, and Moses Lake.

For the reasons above cited, we believe this question is not applicable to our program.

4. Break down and identify other local, state, or federal funds reported in Part I, Block 4.

Funding Source	Item	Amount
District	Admin. indirect costs	$ 500
	Telephone	100
	Total	$ 600
Title VII (Fed)	Salaries	
	Administration	$ 2,766
	Director and management	5,647
	Clerical	5,913
	Evaluator	4,538
	Fringe benefits	3,678
	Supplies and Materials	
	Training materials	200
	Office and duplication	1,000
	Contractual Services	
	Education consultants	2,200
	Evaluation and monitoring	500
	Inservice education	7,000
	Data processing	2,000
	Telephone	300
	Travel	
	Director	390
	Evaluator	285
	Project Manager	260
	Total	$36,677

USDA	Food service personnel salaries	$ 1,526
Title XX) EIRF) Green Giant)	Building or space	1,700
	Total	$ 3,226

5. List the additional services provided and indicate the additional number of students served by the program as a direct result of any cooperative federal funding listed in Part I.

Title VII provides the costs of project administration, training, testing, data processing, evaluation, special consultants to the program for inservice education, and the travel and telephone costs related to these functions. In addition, all personnel working with the school-age children while in Texas are paid by Title VII funds.

Title XX Social Security Funds provide space costs used by the program.

Cooperative funding sources approximately equal that put into the program under URRD, and it is reasonable to say that the number of children served, because of cooperative funding sources, is double what it could have been if URRD funds were required to support all necessary program functions.

The project projected it would serve 125. It actually served 169 children. Half of this number would be approximately 85 children provided services because of cooperative funding.

6. Briefly describe the basis on which your project attendance is recorded. Where are these attendance records filed and who is responsible for keeping them current.

Each teacher is responsible for keeping attendance of the children assigned to her/him and is required to send in a report at the end of each week showing attendance for all children (as well as curriculum progress for each). These reports go to the evaluator who is responsible for soliciting reports if any are late or missing, and for charting attendance for all sites and keeping it current. The files are in Pullman, WA at the evaluation office.

7. What is the most outstanding component (or aspect) of this project?

(1) The Involvement of Parents. The only teaching staff working directly with children in this program is drawn from adults from the families served. The majority of them are parents of children enrolled. Although the program utilizes professional teachers, they do not work directly with the children but back up the parent teaching staff--providing training and supervision.

The program has emphasized the development of training that will enable staff with limited academic background to provide effective educational services to children. It has also emphasized the selection and the adaptation of curriculum materials which are programmed and individualized so the paraprofessional staff can use them effectively.

Since there is a great shortage of professional staff who are bilingual, bicultural, the development of an educational program which can use paraprofessional staff who are bilingual, bicultural, and readily available is very significant. With this level of staffing, the project has been able to achieve outstanding educational gains. Some of these are described in this evaluation. The evaluation done for the Title VII program is even more extensive. Statistically significant superiority is being demonstrated by project students in every academic area, in language and in increased cultural knowledge. Few programs nationally have been able to achieve and document these kinds of gains. Because this program has done so it has been nationally recognized by the Office of Education Review Panel, and is one of the projects selected for the national diffusion network.

In short, parents are used as the essential teaching staff. No loss of educational excellence has resulted from use of less than professional staff--on the contrary the project has demonstrated that paraprofessionals, equipped with appropriate curriculum and training, can achieve outstanding educational gains for the children they serve.

In addition to employment as teaching staff, the involvement of parents in program management through the parent-advisory boards is very extensive (as documented in project Objective 8). Parent participation as volunteers providing myriad services to the program is also very extensive (as documented in project Objective 9).

(2) The Mobile Component. The most unique aspect of the program is the delivery system used in the mobile component. Interstate migrant children from south Texas are followed from their home base community to northern locations. By working cooperatively with the schools, the mobile project staff which follows the children arranges to work with them on released time from their regular classes, or else after school, providing supplementary education as nearly as possible year-round to a moving population. As a result of this supplementary education--with continuity of curriculum and staff--mobile project students are progressing in school far better than control group children who also move in the migrant stream but have only local programs to attend in each temporary stop. (See results outlined under Objective 3.)

8. What are the project's major weaknesses.

The Scramble for Funds. Because no single funding source can, within its administrative guidelines, provide services to children who move on an interstate basis, many different funding sources must be tapped. This places a heavy administrative burden in preparation of funding proposals, and evaluation to different funding sources. Some of the guidelines are conflicting and act at counter purposes. A less complicated program could be administered with much less difficulty.

9. How many children are on your waiting list.

No official waiting list is kept.

10. How many times has your local Advisory Committee met this year?

30 times. There are three advisory groups, one for each major site. Each of these has held 10 meetings. In addition there have been eight other meetings for which records were kept of Executive Committees, personnel committees, and the ad hoc committees for establishing of bylaws.

11. Do you keep minutes of each formal meeting? Yes.

12. In the spaces below, indicate the cost in dollars and personnel-days needed for you to perform an academic follow-up report on students served by your URRD program over the past two to six years.

To continue the administration of the PPVT and WRAT to all students who have had at least 100 days participation under URRD would cost annually approximately the following:

		Personnel days:	
Administrator time in gaining permission for testing, 1 day per site--3 days	$ 300.00	Testers	20
		Administrator	3
Testers: estimate 100 children, 200 tests at $5 per test	1,000.00	Evaluator	5
		Data processor	5
			33 days
Data processor, estimate 1 week processing on tests, checking, recording, and preparation of analysis worksheets	350.00		
Evaluator 1 week for supervision of testing, analysis, and preparation of report	400.00		
Fringe benefits on salaries	110.00		
Postage, mileage, data reproduction, test instruments, etc.	100.00		
Annual Cost	$2,060.00		

APPENDIX A

TECHNICAL SUPPLEMENT TO REPORT ON INSTRUCTIONAL OBJECTIVES

As the URRD guidelines for preparation of the final report requested that presentation of findings on objectives be as brief as possible, information on procedures in data collection and explanatory footnotes on each analysis was not included in the brief summary. As the evaluator feels that some information on these matters is needed for technical readers of the report, it is included here.

TESTING AND DATA COLLECTION

Independent testers are used at each site--e.g., instructional or supervisory staff does not do testing. Each tester is trained on each instrument and must demonstrate appropriate procedures in the testing of at least two children, under observation. Subsequent monitoring visits review testing procedures annually. Training and monitoring of tests is done by the evaluator and/or the resource trainer. All testers are paraprofessional bilingual Mexican-Americans.

Because the project accepts a new child on any day of the year at all sites, and operates 12 months of the year, test scheduling has been adjusted to a continuous program. Attendance is kept cumulatively for each child. Each month testers are sent a test request list indicating which tests (some tests are not used at certain ages) are to be given to any child who is (1) new to the program, or (2) has accumulated 100 days attendance during the previous month.

Some exceptions are made to this scheduling. When the project started, the WRAT was administered to all children enrolled at specified times during the year, and the expectation of gain adjusted to how much the child had attended since the previous test. However, this method tied the analysis of gains to increments in grade equivalent scores since this was the only measure that could be related to variable attendance periods (e.g., 20-days attendance equated to one month of schooling). The project wished to apply tests of statistical significance comparing children with uniform periods of attendance, e.g., 100 days, 200 days, etc., to a project norm group, e.g., children of the same age tested before attending the program for 30 days. It was felt that this provided a stronger statement of program gains without the statistical weakness of the use of grade equivalent scales.

This evaluation continues to use the grade equivalent gain tied to attendance units because a great deal of test data would have had to be thrown out in switching to the other basis, e.g., all tests taken with attendance in between the 100-day intervals. By next year, the program will be able to use both types of analysis

as sufficient numbers of tests will have been given on the interval test schedule basis to allow groups at each age level large enough to warrant statistical comparisons.

At present the BMHS Test of Cultural Concepts is being given to all children enrolled at certain times of the year. This was practical as a means of getting sufficient tests for analysis for this year even though the test was not developed and put into use until January 1976. However, all new children are being given the BMHS Test of Cultural Concepts as a pretest before attendance of 30 days, so the program is beginning the development of a norm group for this instrument. It appears that the test has sufficient reliability that statistical analysis of findings is justified, and a transition to interval testing which will allow us to see the benefits of additional periods of attendance will be made. At present, the project group is lumped together as "all children with over 100 days attendance."

Testers are trained to score each test. A double check of scoring is made when the tests are logged in. All worksheets and original test records are maintained indefinitely and various audits have confirmed the accuracy of testing and scoring and recording procedures (the independent URRD evaluators as well as auditors under the Title VII funding).

FOOTNOTES ON ANALYSIS OF INSTRUCTIONAL OBJECTIVES

1. MATH SCORES. The cumulative analysis reports on 293 tests. On many of the children this represents multiple tests on the same child. The project is continuous. Most (but not all) children enter when they are preschoolers. Their test records are transferred to the URRD group when they become old enough for the school-age program. (NOTE: A program change authorized some children of preschool age to be in the URRD program as of May of this year. Since the cut-off date for testing was April 30 in order to allow time for test analysis, these preschoolers do not affect the analysis for this year). Once in the URRD program they become part of the analysis group, and both their attendance and their tests overlap their attendance as preschoolers as well as their attendance as school-age children. No practical alternative exists to this situation, which would isolate program effect only during their tenure under URRD support. In any event, the academic program in use is continuous.

Each pair of tests is treated separately--e.g., attendance from one to the next calculated into attendance units, and gains in GE measured against that period of attendance. It is quite possible, therefore, for the child to make or exceed the expected gain on one or two pairs of tests, representing different periods of his attendance in the program, and to fail to make it on another period. Percentages are based on total test pairs analyzed.

Since the current analysis of tests includes only those in a six-month period, with rare exceptions this would normally represent only one pair of tests per child.

2. READING SCORES. The cumulative analysis for reading reports on only 193 tests (compared to 293 in math). This is not a typographical error. Because the project did not introduce reading into the preschool curriculum at the same time as math, many children were given the WRAT as preschoolers without being tested on the reading subtest. This meant that pretest scores for comparison of gains were available for far more children in math than in reading. As the reader will note, the number in the analysis group for tests during the past six months is the same--e.g., all of these children had a previous test including both math and reading.

The breakdown by language classification for gain scores in both final and mid-year evaluation turned up a surprise. It had been expected that children who were Spanish dominant with limited English would progress more slowly than children who approached reading with good English skills (since the test used measures reading in English). The opposite appears to be the case. The sample is small to speculate on reasons for this finding. It may be that the use of a teacher who is bilingual may be a greater factor for the Spanish dominant/limited English speaking child, allowing greater progress--e.g., the teacher can give explanations, instruction, and encouragement in the dominant language which makes it possible for the child to progress in the subject. The child who already has the comprehension of English may be held back by skill deficiencies that are less affected by improved communication by a bilingual teacher. Many of the children in the category English dominant/limited Spanish are children who have been special referrals to the program--the schools can refer children who are accepted on a space available basis. Sometimes the referrals are because of dual language needs, and for English dominant children because the school feels the child can profit from additional individual instruction which the program can offer. In any event future evaluations will attempt some further analysis on this matter.

3. MOBILE PROJECT COMPARED TO CONTROLS. The control group used for this special study was from a town near La Grulla, Texas. Children at kindergarten, first, and second grade were identified by the administration on the basis that they traveled away from their home base each year when their parents migrated for farm work. All the children in the control group therefore shared the same socio-economic conditions as the project group--and the factor of disruption in schooling which affects children in the project's mobile component. (Note the northern centers which have many settled out children were not included in this special study analysis.)

As a further check on the comparability (except for the effects of the program) of the two groups a statistical comparison of scores was made between the control group and the project norm group. This norm group consists of the scores of children who first enrolled in the project as five-, six-, or seven-year-olds and whose pretest scores therefore represent the ability level of the population group from which project children are drawn, before

the program has had sufficient time to have much effect on their scores. In all cases the differences between control group and project norm group were not statistically significant by a two-tailed "t" test at the .05 level in math, or in reading, at any age level. This would tend to confirm that the control group is a good match, essentially drawn from the same population as the project children. Actual scores comparing control and project norm group are shown below.

	Age 5.0-5.11	Age 6.0-6.11	Age 7.0-7.11
MATH			
Control, N	16	14	15
Mean raw score	7.000	13.857	18.400
Standard dev.	3.183	3.371	2.874
Norm, N	22	14	13
Mean raw score	8.182	15.071	18.385
Standard dev.	3.775	5.942	4.788
"t"	.480	.405	-.010
d.f.	36 N.S.	26 N.S.	26 N.S.
READING			
Control, N	16	14	15
Mean raw score	8.188	13.571	19.733
Standard dev.	3.430	4.735	6.892
Norm, N	11	8	8
Mean raw score	8.903	11.750	19.375
Standard dev.	3.910	1.982	10.914
"t"	.502	-1.030	-0.097
d.f.	25 N.S.	20 N.S.	21 N.S.

Children in the mobile project were restricted to those which (1) had attended the program for 200 or more days, and (2) had been served both in Texas and in one or more northern locations. The reason for the first restriction is that the 200-day period is used as a cut-off period of attendance for expectation of statistical significance in the project. Frequently children have superiority that is statistically significant after only 100 days, but since in most cases the comparison is between the attendance group and the norm group for the project (not an outside control group as in this case) at 100 days there is some overlap between pretests and posttests, e.g., a child entering as an early four-year-old would have his pretest score in the four-year-old norm group, and could still be four by 100 days attendance, so that, as scores from the same child would be part of both groups being compared at that age, the assumption of independence of samples is violated. By 200 days, although it is feasible that such overlap might occur it is practically such a rare occurrence that statistical analysis by age groups of

children whose pretest scores are used and other children who at that age have attended 200 days does represent truly independent samples.

The reason for the requirement that the child have been served both in Texas and in the north is because the factor of mobility of program providing continuity of service in more than one location is being evaluated in the special study. Both control and mobile project students make yearly migrations. Only project students have the mobile program to bridge the gap as they move.

Actual statistics in the comparison of the control group and the experimental group (e.g., project children in the mobile component after 200 days attendance) is shown below.

	Kindergarten	First Grade	Second Grade
MATH SCORES			
Control N	16	14	15
Mean raw score	7.000	13.847	18.400
Standard dev.	3.183	3.371	2.874
Project N	6	10	7
Mean raw score	17.668	21.000	22.714
Standard dev.	4.844	4.546	3.546
"t"	6.061	6.447	3.068
d.f.	20	22	20
Level of sig.	.0005	.0005	.005
READING SCORES			
Control N	16	14	15
Mean raw score	8.188	13.571	19.733
Standard dev.	3.430	4.735	6.892
Project N	6	10	7
Mean raw score	20.668	25.200	33.286
Standard dev.	10.985	10.570	10.515
"t"	4.167	3.662	4.891
d.f.	20	22	20
Level of sig.	.005	.005	.005

The numbers of children in the project group are small which gives greater play to chance variation. The consistent pattern of results, e.g., both subjects, all three grade levels, showing highly significant superiority by the project students, gives credibility to the findings despite the small numbers. A highly significant finding in one set of comparisons might well be the result of a peculiarity of the members of that small sample if the other comparisons didn't show significant superiority. Since there is a definite pattern affecting all comparisons it seems likely that a true project effect is being measured.

4. BILINGUAL CAPABILITY. The evaluation analysis called for comparison of a child's pretest to his latest test (the first posttest would be taken after 100 days attendance, and at 100-day intervals after that). This is, therefore, the analysis given in the body of the report: 83% of the children advanced to a higher level of bilingualism by their latest test.

As the last test might have been at 300 days, the question left unanswered in the above analysis is: Would that child have advanced to a higher step of bilingualism in 100 days, or in 200 days? A further analysis of scores was therefore made showing the percentage of children who had advanced to a higher classification of bilingualism by 100 days, 200 days, and 300 or more days. The results were as follows: By 100 days 61%, by 200 days 76%, and by 300+ days 92%, had advanced to a higher step of bilingualism.

As all of these percentages exceed the project goal of at least 50% the conclusion remains the same--the project goal was exceeded.

A further analysis of the percentage of children in the top two steps of the language classification scale provides a measure of the effects of longer participation in the program. On pretest 17% were in the top categories. By 100 days 42% were in the top categories. By 200 days, 54%, and by 300+ days, 80%. The further conclusion could have been drawn that the longer the participation in the program the greater the degree of bilingualism attained.

5. CULTURAL HERITAGE. The evaluation design called for comparison of project children to a non-project control group. The children in the control group represented both interstate mobile migrants and settled out migrants from centers located in Washington state operated by other agencies, but using the same recruiting guidelines as those used by this project.

As a check on the true comparability of the control group used to the population from which the project children were drawn, the evaluator carried out a statistical comparison between the external control group and project children who had been in the program less than 30 days when first tested on this instrument. The findings showed no significant differences indicating that the two groups are comparable, and that the differences after longer periods of program attendance may be properly attributed to program effect.

Comparison of project pretest scores of children with less than 30 days attendance and the controls (or comparison group as it is referred to in the evaluation) is as follows:

BMHS TEST OF CULTURAL CONCEPTS

	Age 4.11 and Under	Age 5.0 and Over
Control N	15	14
Raw mean score	18.467	26.857
Standard deviation	5.998	6.666
Project pretest N	39	16
Raw mean score	17.179	26.438
Standard deviation	6.312	7.882
"t"	-0.678	-0.156
d.f.	52 N.S.	28 N.S.

The actual statistics of the project group after 100 or more days attendance when compared either to the project norm group (before 30 days attendance) of the same age, or to the external control group yields a significant superiority by the project students beyond the .01 level. The statistics for the comparison reported in the body of the report were as follows:

BMHS TEST OF CULTURAL CONCEPTS

	Age 4.11 and Under	Age 5.0 and Over
Control N	15	14
Raw mean score	18.467	26.857
Standard deviation	5.998	6.666
Project 100+ attend. N	47	87
Raw mean score	26.085	34.333
Standard deviation	4.772	5.842
"t"	5.052	4.382
d.f.	60	99
Level of significance	.0005	.0005

The project appears to be having a very significant effect on increasing bicultural knowledge in the areas measured by this test.

APPENDIX B

Technical Report on the Bilingual Mini Head Start Test of Cultural Concepts

The BMHS Test of Cultural Concepts was developed in 1975-76 to meet the need of a test of knowledge related to culture that was appropriate to children age 3-8. It was the finding of the project that most cultural heritage materials are geared to the older school-age child who has the time perspective to learn about history, famous figures, and rather abstract concepts. Other tests combine knowledge questions with attitude questions requiring the selection of words or faces along a continuum of five or more steps from positive to negative. We felt the younger children in our project group would not be able to respond to this multiple choice answer and that the results would reflect their confusion leading to very poor test reliability.

Content Validity

The project therefore elected to design its own test. Six aspects of culture were selected by the Educational Director, in consultation with other staff, which he felt were aspects that would be meaningful to small children.

Food was one aspect chosen. Staff then identified food items which they felt were most typical of Mexico--arroz con pollo, frijoles, enchilada, taco, cabrito, etc., and food most typical of the United States--hamburger, hot dog, cherry pie, doughnuts, turkey, etc.

Clothing was another topic chosen. Staff nominated typical items of clothing from Mexico--poncho, sombrero, huaraches, etc. and from the U.S.--T-shirt, tennis shoes, blue jeans, etc.

The topic representing the highest level of abstraction chosen was that of national symbols--the flags of both countries, and the seal of the U.S. with the eagle with the arrows and the olive branch, and the Mexican eagle with the snake in its talons.

The other topics chosen were holidays and celebrations of each culture (particularly those important to young children), songs and musical games (sung by young children or those used at holidays or celebrations which they would hear); and dances (that could be danced by young children).

Most other texts examined by the project before choosing to write its own left out music and dance, which are commonly considered rather important aspects of a culture. We felt this was probably because music and dance were difficult to portray in a paper and pencil test. The project test made a tape to be played on a cassette (singing by teachers, or music from records used for dancing) with a small sample of each song or dance. Hearing this, the children were then asked to choose between four pictures, the one that "went with" the music.

All test items required a nonverbal response--choosing one from four pictures in response to the cue given by the tester. Spanish word cues were used for all items related to Mexican culture, English word cues for all items related to U.S. culture.

Field Testing

Field testing was done of the original test and some pictures changed if the children could not readily recognize the object. In other cases, a pair of pictures was tried out on children and the one most frequently chosen to represent something--e.g., the dance the "Hokey Pokey," was selected for use in the test.

Reliability Data

The final version of the test was given to 70 children in the Texas center during January 1976. The scores from this group of children were analyzed to determine the reliability of the instrument. The Kuder Richardson 20 formula for reliability based on the pattern of answers to each test item, yielded a reliability of .90. For a project made instrument, this level of reliability seemed extremely high.

Nearly every test item differentiates well by age--i.e., misses appear to represent a growth pattern rather than random choice of answer. The test appears to be best adapted to the preschool through kindergarten age group. Older children score so high on the test that there is insufficient range to measure gain for first grade and higher. The project is considering development of a second level of the test, adding items of a little higher level of difficulty for the older children and eliminating some items which children uniformly are able to answer by age five.

The project is now in the process of using the tests with different groups outside the project to get a pattern of responses related to different cultural backgrounds.

Administration Data--Time and Cost

The test contains 44 test items and requires from 5 to 10 minutes to administer. It must be given individually. The test book contains 17 plates of four items each (68 picture choices). The same plate of four pictures may be used for more than one test item, each plate containing one or more dummy choices as well as the pictures related to test questions. Testers must also have the cassette tape for the song and dance questions. The test materials cost approximately $6.00, plus the time of staff in assembling the test books, coloring in some items, and duplicating tapes.